

Claims

[c1] We claim as our invention:

1. A method for producing a two-piece face component for assembly with an aft-body of a golf club head, the face component having an interior surface as well as an exterior surface, the method comprising:
casting a face cup of the face component, the face cup including a front face and a return portion;
forming an opening in the front face of the face cup;
forming a striking face insert separate from the cast face cup;
inserting the striking face insert into the opening of the cast face cup simultaneously forming the face cup to the dimension complementary to the aft-body, and
securing the striking face insert in the opening of the cast face cup to form an assembled face component, wherein the return portion of the assembled face component includes a thin walled flange with a thickness of no more than 0.060 inch.

[c2] 2. The method according to claim 1 wherein the opening in the front face of the face cup is substantially equal in size to the striking face insert.

- [c3] 3. The method according to claim 1 wherein the opening in the front face is created using a laser.
- [c4] 4. The method according to claim 1 wherein the opening in the front face is created using a water jet.
- [c5] 5. The method according to claim 1 wherein casting the face cup includes casting the face cup such that the front face has a hole defined therein, the hole being smaller in size than the striking plate insert, and wherein forming the opening in the front face includes machining the hole until the opening is substantially equal in size to the striking face insert.
- [c6] 6. The method according to claim 1 further comprising placing a retaining ring around the striking face insert prior to inserting the striking face insert into the opening of the cast face cup.
- [c7] 7. The method according to claim 6 wherein the retaining ring is comprised of copper and aluminum.
- [c8] 8. The method according to claim 1 wherein forming the striking face insert includes forging the striking face insert and trimming the striking face insert to a desired shape.
- [c9] 9. The method according to claim 1 wherein the striking

face insert is formed from a sheet of metal, and further comprising hot forming the striking face insert to provide a bulge angle and a roll angle.

- [c10] 10. The method according to claim 9 wherein the striking face insert is stamped from the sheet of metal.
- [c11] 11. The method according to claim 9 wherein the striking face insert is cut from the sheet of metal using a laser cutting process.
- [c12] 12. The method according to claim 9 wherein the striking face insert is cut from the sheet of metal using a water jet cutting process.
- [c13] 13. The method according to claim 1 wherein inserting the striking face insert into the opening of the cast face cup includes swaging the face insert into the opening of the cast face cup while simultaneously forming the face cup.
- [c14] 14. The method according to claim 1 further comprising machining the exterior surface of the face component such that the striking face insert is flush with the front face of the face cup.
- [c15] 15. The method according to claim 1 wherein securing the striking face insert into the opening of the cast face

cup includes welding the striking face insert to the face cup, the welding occurring on the interior surface of the face component.

[c16] 16. The method according to claim 15 wherein welding includes any one of laser welding, plasma welding, and e-beam welding.

[c17] 17. A method for producing a golf club head including a two-piece face component and aft-body, the face component having an interior surface as well as an exterior surface, the method comprising:
casting a face cup of the face component from a titanium alloy material, the face cup including a front face and a return portion;
forming an opening in the front face of the face cup;
forming a striking face insert separate from the face cup, the striking face insert being composed of a titanium alloy material;
inserting the striking face insert into the opening of the cast face cup while simultaneously forming the face cup to a dimension complementary to the aft-body;
machining the exterior surface of the face component such that the striking face insert and the front face of the face cup are flush;
welding the striking face insert to the face cup, the welding occurring on the interior surface of the face

component to form an assembled face component; and securing the assembled face component to the aft-body, wherein the return portion of the assembled face component includes a thin walled flange having a thickness of no more than 0.050 inch.

[c18] 18. The method according to claim 17 wherein the striking face insert is formed from a sheet of titanium alloy material and further comprising hot forming the striking face insert to provide a bulge angle and a roll angle.

[c19] 19. A method for producing a golf club head including a two-piece face component and an aft-body, the face component having an interior surface as well as an exterior surface, the method comprising:
casting a face cup of the face component from a titanium alloy material, the face cup including a front face and a return portion;
forming an opening in the front face of the face cup;
forging a striking face insert from a titanium alloy material;
swaging the forged striking face insert into the opening of the cast face cup while simultaneously forming the face cup to a dimension complementary to the aft-body;
machining the exterior surface of the face component such that the striking face insert and the front face of the face cup are flush;

welding the forged striking face insert to the face cup, the welding occurring on the interior surface of the face component to form an assembled face component; and securing the assembled face component to the aft-body, wherein the return portion of the assembled face component includes a thin walled flange having a thickness of no more than 0.050 inch.

[c20] 20. The method according to claim 19 wherein casting the face cup includes casting the face cup such that the front face has a hole defined therein, the hole being smaller in size than the striking face insert, and wherein forming the opening in the front face includes machining the hole until the opening is substantially equal in size to the striking face insert.